# CITY OF ALBUQUERQUE

*Planning Department* Alan Varela, Director



Mayor Timothy M. Keller

January 9, 2023

Shawn Biazar SBS Construction and Engineering, LLC 10209 Snowflake Ct. NW Albuquerque, NM 87114

RE: 112 Princeton Dr. SE Permanent C.O. - Accepted Engineer's Certification Date: 12/21/22 Engineer's Stamp Date: 02/02/22 Hydrology File: K16D094

Dear Mr. Biazar:

PO Box 1293 Based on the Certification received 12/29/2022 and site visit on 01/06/2023, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

Albuquerque If you have any questions, please contact me at 924-3995 or <u>rbrissette@cabq.gov</u>.

NM 87103 Sincerely,

Renée C. Brissette

www.cabq.gov

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department



# City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: <u>112 PRINCETON DR. SE GRADING PLAN</u>	Building Permit #:	Hydrology File #: K16D094
DRB#:	_EPC#:	Work Order#:
Legal Description: LOT 6, BLOCK 24, UNIVERS	SITY HEIGHTS ADDITION	
City Address: 112 PRINCETON DR. SE		
Applicant: SBS CONSTRUCTION AND ENG	INEEING, LLC	Contact: SHAWN BIAZAR
Address:7632 WILLIAM MOYERS AVE., NE, AI	BUQUERQUE, NM 87122	
Phone#: (505) 804-5013	_Fax#: (505) 897-4996	E-mail: AECLLC@AOL.COM
Other Contact:		Contact:
Address:		
Phone#:		_E-mail:
TYPE OF DEVELOPMENT: PLAT	(# of lots) RESIDENCE	DRB SITEADMIN SITE
IS THIS A RESUBMITTAL? Yes	<u>X</u> No	
DEPARTMENT TRANSPORTATION	X HYDROLOGY/DRAINAGE	
Check all that Apply:		AL/ACCEPTANCE SOUGHT:
TYPE OF SUBMITTAL:		RMIT APPROVAL
X ENGINEER/ARCHITECT CERTIFICATION	X CERTIFICATE	OF OCCUPANCE
PAD CERTIFICATION	PRELIMINAR	Y PLAT APPROVAL
CONCEPTUAL G & D PLAN		DR SUB'D APPROVAL
GRADING PLAN		OR BLDG. PERMIT APPROVAL
DRAINAGE REPORT	FINAL PLAT	
DRAINAGE MASTER PLAN		
FLOODPLAIN DEVELOPMENT PERMIT A	APPLIC SIA/ RELEASE	E OF FINANCIAL GUARANTEE
ELEVATION CERTIFICATE		VPERMIT APPROVAL
CLOMR/LOMR	GRADING PE	
TRAFFIC CIRCULATION LAYOUT (TCL)	SO-19 APPRO	
TRAFFIC IMPACT STUDY (TIS)		MIT APPROVAL
STREET LIGHT LAYOUT		D CERTIFICATION
OTHER (SPECIFY)	- WORK ORDER	APPROVAL
PRE-DESIGN MEETING?	CLOMR/LOM	R
		DEVELOPMENT PERMIT
		CIFY)
DATE SUBMITTED: 12-26-2022		
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED:	
	FEE PAID:	

## Location

Lot 6, Block 24, University Heights Addition is located at 112 Princeton SE Albuquerque NM 87106. See attached portion of Vicinity Map K-16-Z for exact location.

### Purpose

The purpose of this drainage report is to present a grading and drainage solution for the proposed buildings.

### **Existing Drainage Conditions**

This lot is very flat and drains from north to south. No offsite runoff enters this site.

# **Proposed Conditions and On-Site Drainage Management Plan**

The drainage patterns will remain the same. The additional runoff volume generated by this project garage will be retained on site. The total volume requirement under proposed conditions is 909.43 cf based on the 100-yr/10-day volume. Retention volume provided is 1007.67 cf. First Volume requirement is (0.42/12\*3,585.50) 125.49 cf

#### **VOLUME CALCULATIONS FOR 10 DAY STORM**

BASIN	AREA (SF)	AREA (AC)	AREA (MI <sup>2</sup> )
ON-SITE	7,171.00	0.16462	0.000257
$E = \frac{EA(AA) + EB(AB) + EC(AC) + ED(AD)}{AA + AB + AC + AD}$			
V-360 = E (AA + AB + AC + AD)			
EA = 0.6	52		
EB = 0.8	30		
EC = 1.0	)3		
ED = 2.3	33		

P-60 = 1.78P-360 = 2.29P-1440 = 2.59P-10 Day = 3.62

#### **EXISTING CONDITIONS**

PROPOSED CONDITIONS

E - 0.90 IN	$\mathbf{F} = 1.66  \mathbf{IN}$
AD = 0.00%	AD = 50.00%
AC = 0.00%	AC = 40.00%
AB = 100.00%	AB = 10.00%
AA = 0.00%	AA = 0.00%

$\mathbf{F} =$	U.8U IN	E =	1.66 IN
V-360 =	478.07 CF	V-360 =	990.29 CF
AD =	0.0 AC	AD =	0.08231 AC
$\mathbf{V-10} \mathbf{DAY} =$	478.07 CF	V-10 DAY =	1,387.59 CF

# V (REQUIRED) =990.29 - 478.07 = 512.22 CF USING V-360 V (REQUIRED) =1,387.50 - 478.07 = 909.43 CF USING V-10 DAY

# FLOW CALCULATIONS

A =1.71 CFS/AC B = 2.36 CFS/ACC = 3.05 CFS/ACD = 7.34 CFS/AC

### TOTAL QP =QPA\*AA + QPB\*AB + QPC\*AC + QPD\*AD

QP (HISTORICAL) = 0.45 CFS QP (PROPOSED) = 0.69 CFS

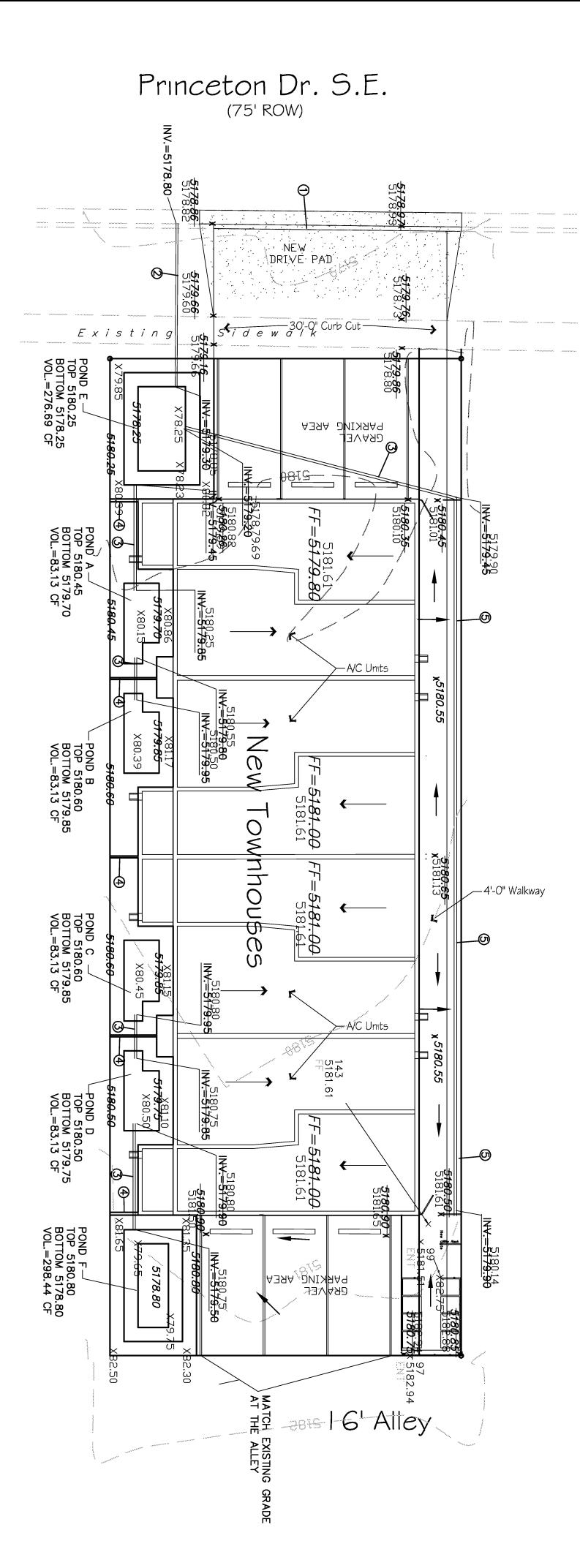
## PONDING VOLUME CALCULATION

PONDS A & B & C & D BOTTOM AREA (@ 5179.75)= 50.57 SF TOP AREA (@ 5180.50) = 171.13 SF DEPTH = 0.75'POND VOLUME=(171.13+50.57)/2\*0.75 POND VOLUME=83.13 CF PONDS TOTAL VOLUME = 83.13 \* 4 = 332.54 CF

<u>POND F</u> BOTTOM AREA (@ 5178.80)= 51.80 TOP AREA (@ 5180.80) = 246.64 DEPTH = 2.00'POND VOLUME=(248.64+51.80)/2\*2.00' POND VOLUME=298.44 CF

<u>POND E</u> BOTTOM AREA (@ 5178.25)= 81.26 TOP AREA (@ 5180.25) = 295.43 DEPTH = 2.00'POND VOLUME=(296.43+81.26)/2\*2 POND VOLUME=376.69 CF

TOTAL VOLUME (A+B+C+D+E+F) =VOL = 332.54+376.69+298.44 = 1.007.67 CF



#### NOTICE TO CONTRACTOR PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19")

- 1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division. 2. An excavation permit will be required before beginning any
- work within City Right Of Way. 3. All work on this project shall be performed in accordance with
- applicable federal, state and local laws, rules and regulations concerning construction safety and health. 4. Prior to any excavation, the contractor must contact New
- Mexico One Call, dial "811" [or (505) 260 1990] for the location of existing utilities. 5. Prior to construction, the contractor shall excavate and verify
- contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- 6. Backfill compaction shall be 95%. 7. Maintenance of the facility shall be the responsibility of the
- owner of the property being served. 8. Work on arterial streets may be required on a 24\_hour basis.
- 9. For excavation and barricading inspections, contact DMD Construction Services Division.

APPROVALS INSPECTOR

# OKEYED NOTES:

- 1. INSTALL NEW DRIVEPAD PER C.O.A. STD DWG 2425.
- 2. INSTALL 4" STORM DRAIN PIPE, SCHEDULE 40. INSTALL CURB DRAIN PER C.O.A. STD DWG 2235.
- 3. INSTALL 4" STORM DRAIN PIPE, SCHEDULE 40.
- 4. DIVIDING WALL, PVC SLAT.
- 5. 4" PERFERATED PIPE WITH LINER AND GRAVEL ON TOP

DRAINAGE CERTIFICATION I, REZA AFAGHPOUR, NMPE11814 OF SBS CONSTRUCTION AND ENGINEERING, LLC, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 02-02-2022 . THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS <u>9801 LEONARD MARTINEZ OF SBS</u> CONSTRUCTION AND ENGINEERING. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR FINAL CERTIFICATE OF OCCUPANCY

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE

REZA AFAGHPOUR, NMPE 11814

the locations of all obstructions. Should a conflict exist, the

IAME	DATE

DR MX-M   ENTRAL CENTRAL SITE   A 24   A 24   A 24   MX-M MX-M   B 24   MX-M MX-M   B	
SILVER SILVER   24 24   25 26   26 27   27 28   28 29   29 29   29 29   29 29   29 29   29 29   29 29   29 29   20 29   20 29   20 29   20 29   20 29   20 29   20 29	MX-T MX-T   R-1C R-1C   R-1C R-1C   K-16-Z
	LEAD AVE

FIRM MAP:

LEGAL DESCRIPTION:

LOT 6, BLOCK 24, UNIVERSITY HEIGHTS ADDITION ADDRESS: 112 PRINCETON DR., SE ALBUQUERQUE, NM 87106

EXISTING CONTOUR (MINOR)

BOUNDARY LINE

EXISTING GRADE

PROPOSED SPOT ELEVATION

EXISTING FLOWLINE ELEVATION

PROPOSED RETAINING WALL

BOTTOM OF CHANEL

TOP OF FOOTING

AS-BUILT GRADES

HIGH POINT

TOP OF RETAINING WALL

AS-BUILT SPOT ELEVATIONS

LEGEND ---- EXISTING CONTOUR (MAJOR)

X 42.70

**X** 5029.16

× <sub>5075.65</sub>

BC=41.30

*TF=42.00* 

HP

5181.13 <del>5180.65</del>

X81.65

*TRW=45.12* 









SCALE: 1"=10'



		CETON DR., NG PLAN	SE
DRAWING:	DRAWN BY:	DATE:	SHEET #
202138GD.DWG	SH-B	1-25-2022	

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